

SPECIFICATIONTITLE OF INVENTIONOVERFLOW SENSITIVE ARITHMETIC INSTRUCTION OPTIMIZATION USING
CHAININGCross Reference to Related Applications

[001] This Application is a continuation-in-part of co-pending application serial no. 10/686,513 filed on October 14, 2003 in the name of inventors Zhiquan Chen and Judith Schwabe and entitled "Optimization of N-Base Typed Arithmetic Expressions", Attorney Docket No. SUN-P4171CNT2, which is a continuation of co-pending application Serial No. 10/002,437 filed November 1, 2001 in the name of inventors Zhiquan Chen and Judith Schwabe and entitled "Optimization of N-Base Typed Arithmetic Expressions", ^{Now U.S. patent 6,687,898,} Attorney Docket No. SUN-P4171CNT, which is a continuation of application serial no. 09/439,113 filed November 12, 1999 (now U.S. Pat. No. 6,363,523) in the name of inventors Zhiquan Chen and Judith Schwabe and entitled "Optimization of N-Base Typed Arithmetic Expressions", Attorney Docket No. SUN-P4171, commonly assigned herewith.

[002] This application is related to the following:

^{09/243,101}
U.S. Patent Application Serial No. ~~09/23,101~~, filed February 2, 1999 in the name of inventors Joshua Susser and Judith Schwabe and entitled "Object-Oriented Instruction Set for Resource-Constrained Devices", Attorney Docket No. SUN-P-3729, commonly assigned herewith.

6 U.S. Patent Application Serial No. ^{10/712,475} ~~10/712,475~~, ^{now U.S. patent 7,010,786,} filed November 12, 2003 in the name of inventors Judith Schwabe and Zhiqun Chen, entitled "Predictive Arithmetic Overflow Detection", Attorney Docket No. SUN-P8742, commonly assigned herewith.

6 U.S. Patent Application Serial No. ^{10/712,463} ~~10/712,463~~, filed November 12, 2003 in the name of inventors Judith Schwabe and Zhiqun Chen, entitled "Optimization of N-Base Typed Arithmetic Instructions via Rework", Attorney Docket No. SUN-P4181, commonly assigned herewith.

6 U.S. Patent Application Serial No. ^{10/712,919} ~~10/712,919~~, ^{now U.S. patent 7,107,581,} filed November 12, 2003 in the name of inventors Judith Schwabe and Zhiqun Chen, entitled "Overflow Predictive Arithmetic Instruction Optimization Using Chaining", Attorney Docket No. SUN-P8744, commonly assigned herewith.

FIELD OF THE INVENTION

[003] The present invention relates to the field of computer science. More particularly, the present invention relates to a system and method for overflow sensitive arithmetic instruction optimization using chaining.